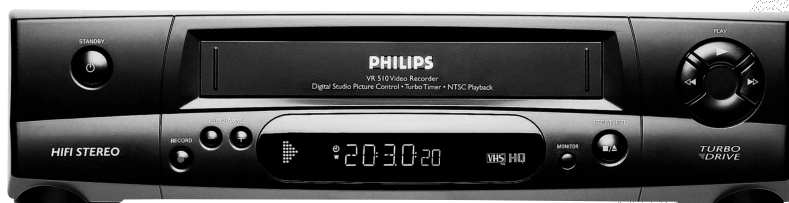


Table of contents

1	Introduction	Important notes for operation	Page 4
		The most important functions of your new video recorder	Page 5
		Important information for customers in Great Britain	Page 6
2	Connecting the video recorder	Preparing the remote control for operation	Page 7
		Connecting to a TV set with a scart socket	Page 7
		Connecting to a TV set without a scart socket	Page 8
		Connecting additional devices	Page 9
3	Initial installation	Setting channel, date and time for the first time	Page 10
		Searching for a TV channel manually	Page 11
		Allocating decoder	Page 12
		Using a satellite receiver	Page 13
		Searching for a TV channel automatically	Page 14
4	Settings	Sorting and clearing of TV channels manually	Page 15
		Changing the time and date	Page 16
		General information	Page 17
		Navigation in the main menu	Page 17
5	Operating instructions	Playing cassettes	Page 18
		Playing back NTSC cassettes	Page 18
		Selecting tape position display type	Page 19
		Reset / display tape position	Page 20
6	Playback	Searching for tape position with picture (picture search)	Page 20
		Searching for tape position without picture (forward wind and rewind)	Page 20
		Searching automatically for tape position (index search)	Page 21
		Finding a blank position on tape automatically	Page 21
		Still picture / slow motion	Page 22
7	Removing picture interference	Optimizing tracking	Page 23
		Optimizing still picture	Page 23
8	Manual recording	Starting and stopping of recording manually	Page 24
		Starting recording manually and stopping automatically	Page 25
		Lining up manual recordings	Page 26
		Selecting the recording speed	Page 26
		Recording automatically from a satellite receiver	Page 27
9	Programmed recordings	Programming timer with VIDEO Plus+	Page 28
		Problem solving (VIDEO Plus-Programming)	Page 30
		Programming timer without VIDEO Plus+	Page 31
		Problem solving (Timer programming)	Page 33
		"Turbo Timer"-Recording	Page 34
10	Other functions	Problem solving (Turbo Timer programming)	Page 35
		Delete / check / change programmed recordings	Page 36
		Adjusting automatic switch-off	Page 37
		Adjusting the child lock	Page 37
11	Suppressing interference	Replaying cassette continuously	Page 38
		Changing the TV system	Page 39
		Adjusting the OSD information	Page 40
		Selecting the sound channel	Page 40
12	Before you call an engineer	Energy-saving mode	Page 41
		Optimizing the modulator	Page 42
		Switching the modulator on and off	Page 43
		Problem solving	Page 44
		Technical data	Page 44

VCR



VR 510/07

Operation instructions



Let's make things better.



PHILIPS

Remote control

You will find explanations for the controls and the displays on your video recorder on the second to last page of these operating instructions.



TIP



TV
STANDBY/ON

- Call up additional functions (see below)
- Switch set on / off
- Interrupt function
- Interrupt programmed recording
- Additional TV function only (see below)
- Activate / deactivate child lock
- Change between TV reception and video recorder reception
- Eject inserted cassette

MUTE
CHILD LOCK
MONITOR

EJECT

0-9

- Enter data
- Select programme number
- Programme recordings
- Check / change recordings
- Delete recordings
- Programme Turbo Timer recordings

TIMER

TURBO TIMER

MENU
OK

- Switch main menu on / off
- Store
- Confirm
- Select function
- Delete entry
- Delete programmed recording
- Select next / previous menu point
- Select next / previous programme number
- Select input field
- In STOP or STANDBY mode: Rewind
- In playback mode: Fast reverse
- Play back recorded cassette
- In STOP or STANDBY mode: Wind forward
- In playback mode: Fast forward
- Stop tape
- Start manual recording
- With or : Search for index marking
- Stop tape and show still picture

SELECT
CLEAR / CL

↑ P+ / ↓ P-

+ / -

PLAY

STOP
RECORD
INDEX

STILL

Additional TV functions

TV / -
TV / +
TV / P+
TV / P-
TV / **MUTE**
TV / **STANDBY/ON**

- Reduce TV volume
- Increase TV volume
- Select next TV programme number
- Select previous TV programme number
- Switch sound on / off
- Switch TV on / off

Accessories

- ✓ Operating instructions
- ✓ Quick Start Guide
- ✓ Remote control
- ✓ Batteries
- ✓ Aerial cable
- ✓ Mains cable



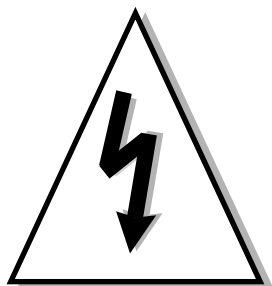
Welcome to the family of owners of Philips VHS video recorders.

Thank you for choosing to buy our product. Please wait at least three hours after transporting the appliance before starting installation. The set needs this time in order to become acclimatised to its new environment (temperature, air humidity, etc.).

Your Philips Team hopes that you will enjoy using your new video recorder.

This product complies with the requirements of Directive 73/23/EEC + 89/336/EEC + 93/68 EEC.

Important notes for operation



You should not under any circumstances open the set yourself. You would expose yourself to the risk of an electric shock from the hazardous high voltage inside.

When the appliance is connected to the power supply, there are some components which are constantly operational. To switch off the video recorder completely, you must disconnect it from the power supply.

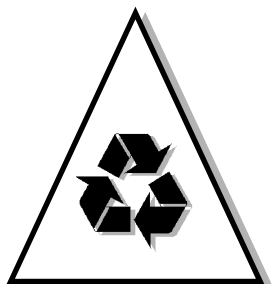
The video recorder does not contain any components that can be repaired by the customer.



Make sure that air can circulate freely through the ventilation slots on the video recorder.

Make sure that no objects or liquids enter the video recorder. If liquid is spilt into it, disconnect the video recorder immediately from the power supply and call the After Sales Service for advice.

The video recorder should not be used immediately after transportation from a cold to a hot area or vice versa, or in conditions of extreme humidity.



These operating instructions have been printed on non-polluting paper. Please deposit old batteries at the relevant collection points.

Please make use of the facilities available in your country for disposing of the video recorder packaging in a way that helps to protect the environment.

This electronic device contains many materials which can be recycled. Please enquire about the possibilities for recycling your old set.

The most important functions of your video recorder

Your Philips video recorder can be used, not only for recording and playing back VHS cassettes, but it also has a whole range of special functions which will make day-to-day use of your new video recorder easier for you.



Plug in and off you go - getting started with your new video recorder just couldn't be simpler. Once you have connected the cables, you will immediately see text on the screen which will assist you at all stages of operation.



Philips has developed a system which makes it possible for you to get the best possible playback quality from video cassettes. Interference on old, often-played tapes is minimized, and in new or high quality cassettes, details are even clearer.




The precision mechanism developed by Philips guarantees short rewind times and, by automatically detecting the length of the tape, makes operation as easy as possible for the user.



The simple programming system for video recorders revolutionized the video world when it was introduced. Instead of having to enter many different details (date, starting time, finish time, programme), which was often tiresome and liable to errors, all you have to do is enter a number, up to nine digits long, which can be found in any TV programme listing. Once you have done that, all the relevant details for the recording are stored.

VIDEO Plus+ and PlusCode are registered trademarks of the Gemstar Development Corporation. The VIDEO Plus+ system is manufactured under licence from the Gemstar Development Corporation.

So that you can identify your machine in the event of theft, enter the serial number (PROD. NO) here. You will find it on the type plate on the back of the set.

MODEL NO.	VR 510/07	PHILIPS
PROD. NO.	

If you have any problems using the video recorder, please read the corresponding chapters in this instruction manual. If you have any questions, there is also a customer support service available in your country. You can find the telephone number in the guarantee information enclosed in the packaging. Please have your model number (MODEL NO.) and production number (PROD. NO.) ready.

Important information for customers in Great Britain

This set is fitted with an approved moulded 13 amp plug. To change the fuse in this plug or to attach a different plug, please proceed as follows:

- 1 Take off the fuse cover and remove the old fuse
- 2 Insert a new fuse. Suitable fuses are those of the type BS 1362 3A, A.S.T.A. standard or BSI standard
- 3 Close the fuse cover

If the attached plug does not meet your requirements, you can cut it off and replace it with a suitable plug. Please observe the following conditions:

If your new plug uses a built-in fuse, this should be a 3A fuse.

If your new plug does not contain a built-in fuse, please do not use any fuses in your fusebox with a rating of more than 5A.

Please destroy the old, cut-off plug so that it cannot be used elsewhere.

- 4 Connect the blue cable (neutral "N") to the terminal in the plug which is marked with the letter "N" or coloured black
- 5 Connect the brown cable (live, "L") to the terminal in the plug which is marked with the letter "L" or coloured red
- 6 Do not in any circumstances connect either of the two cables to the terminal in the plug which is marked with the letter "E", the symbol "⏏" or coloured green or green / yellow



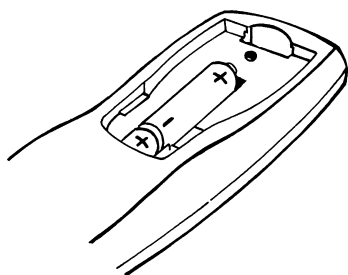
Before you refit the plug cover, make sure, that the grip at the bottom of the plug is clamped over the plastic cover of the lead, not just over the two wires.

2

Connecting the video recorder

Preparing the remote control for operation

- 1 Take the remote control of the video recorder and the enclosed batteries (2 batteries)
- 2 Open the battery compartment, insert the batteries as shown and then close the battery compartment. The remote control is now ready to use



Connecting to a TV set with a scart socket

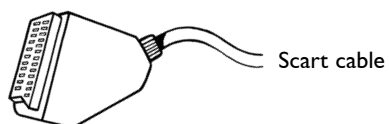
- 1 Have the following cables ready: An aerial cable (enclosed), a mains cable (enclosed) and a scart cable



Aerial cable



Mains cable



Scart cable

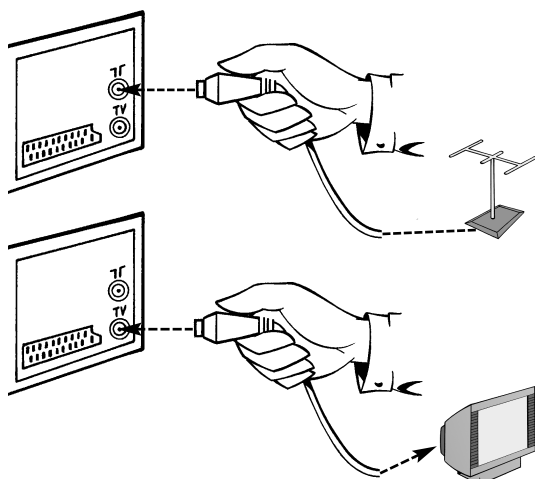
What is a scart cable?

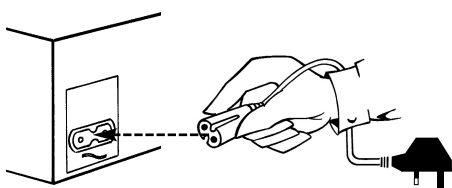
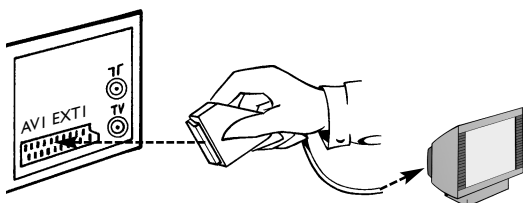
The scart or Euro-AV cable serves as the universal recording and playback connector for picture-, sound- and control signals. With this type of connection, there is practically no loss of quality during the signal transfer. We recommend that you use a scart cable (available from specialist stores) when using this video recorder.



PARDON?

- 2 Switch off your TV set
- 3 Remove the aerial cable plug from the back of your TV set and insert it into the aerial socket **TV** on the back of the video recorder
- 4 Take the enclosed aerial cable and connect the appropriate ends to the aerial socket of your TV set and to the TV socket **TV** on the back of the video recorder





- 5** Take a scart cable and connect one end to the scart socket on the back of your TV set and the other to the scart socket **AVI EXT I** on the back of the video recorder

✗ My TV set has more than one scart socket

- ✓ Then you have a more modern TV set. Please check first (with the aid of the operating instructions for the TV set), which of the available scart sockets is intended for use with the video recorder.



- 6** Take the enclosed mains cable and connect the appropriate end to the mains socket \sim on the back of the video recorder and the other to the nearest free socket

- 7** Your set should automatically switch over to the programme number allocated to video recorder operation (usually: EXT, 0 or AV). You will see the welcome screen.

✗ My screen is still blank

- ✓ If a TV set receives a signal via the scart socket, it usually switches automatically to the corresponding programme number. This automatic function might be adversely affected. Please switch manually to the corresponding programme number (usually: EXT, 0 or AV)
- ✓ Check the cable connections

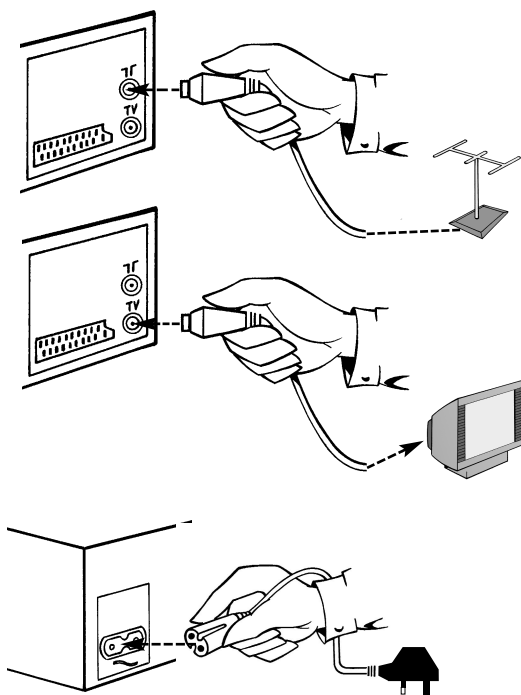


- 8** You can find more details in the chapter "Initial Installation"

Connecting to a TV set without a scart socket



- 1** Have the following cables (provided with your new video recorder) ready: An aerial cable and a mains cable
- 2** Switch off your TV set



3 Remove the aerial cable plug from the back of your TV set and insert it into the aerial socket **TV** on the back of the video recorder

4 Take the enclosed aerial cable and connect the appropriate end to the aerial socket of your TV set and to the TV socket **TV** on the back of the video recorder

5 Take the enclosed mains cable and connect the appropriate ends to the mains socket **~** on the back of the video recorder and the other to the nearest free socket

6 Switch on your TV set and select on your TV set the programme number which will in future be used for operation with the video recorder

7 On your TV change the settings of this programme number until you see the adjacent welcome screen clearly and in colour on the screen

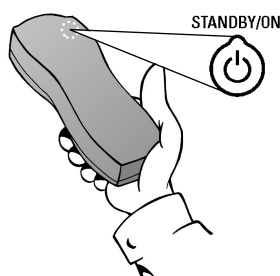


X There is no test image

- ✓ Your video recorder "broadcasts" on the frequency 583MHz (CH35) in the UHF range (ultra highfrequency). Repeat the matching of the selected programme numbers on the TV set.
- ✓ Check the cable connections



PROBLEM



8 Switch off the video recorder with the standby button **⏻**.

Connecting additional devices

Additional devices, such as a decoder, camcorder, satellite receiver, etc., can be connected to the scart socket **AV2 EXT2** on the back of the video recorder. You will need a scart cable for this (available from specialist stores).

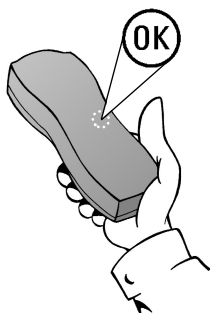
There are two audio output sockets on the back of the video recorder - **AUDIO OUT L R**. You can connect a stereo system to these.



3

Initial installation

Setting channel, date and time for the first time



- 1 Using the **OK** button activate the automatic initial installation

"Aim" correctly

Always point the remote control at the video recorder and not at the TV set.



TIP



- 2 The set seeks out and stores all available TV channels as well as time and date. This procedure may take several minutes. As soon as all the data has been stored, the screen will show the message "STORED".

The Teletext clock resets automatically

If a TV channel which has Teletext is stored as programme number P01, the video recorder automatically takes in the date and time from the text function. The change from summer to winter time and vice versa should also occur automatically.



TIP

- 3 The initial setting of channel, date and time is completed

✗ The time is not shown in the display of the video recorder ("--:--") or is shown incorrectly

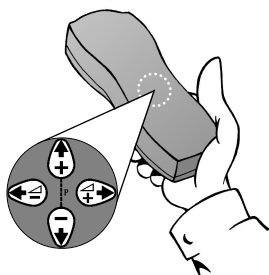
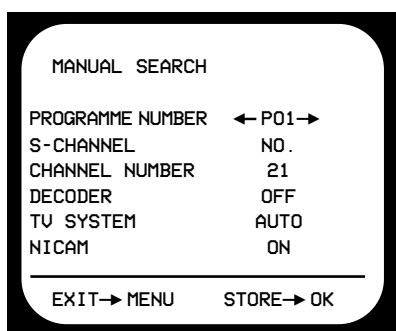
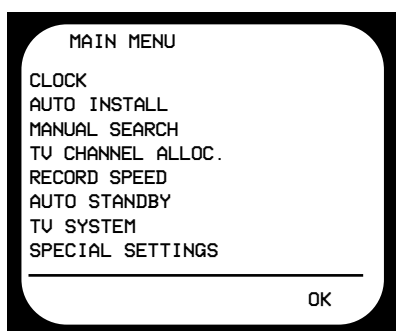
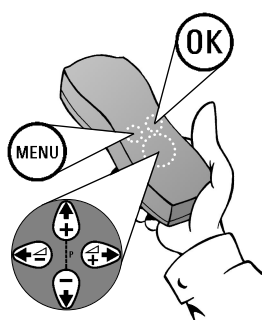
✓ While initial installation was going on, the set was unable to recognise the time. Please read the paragraph in Section 4 "Changing the time and date" to correct this problem



PROBLEM

Searching for a TV channel manually

In exceptional cases, it may happen that on initial installation the set does not find all the available TV channels. In this case, the missing TV channels must be searched for and stored manually.



- 1 Switch on the TV set and - if necessary - select the programme number set for video recorder operation
- 2 Press the **MENU** button on the remote control. The on-screen menu appears
- 3 Use **↓P-** or **↑P+** to select the option “**MANUAL SEARCH**”
- 4 Confirm with **OK**
- 5 Use **↔** or **↔** to select the programme number (e.g.: “**P 01**”), which you want to manually allocate to a TV channel
- 6 If you are looking for a special channel, use **↓P-** or **↑P+** to select the option “**S-CHANNEL**” and use **↔** or **↔** to activate the “**YES**” setting. To search for a “normal” channel, the “**NO**” setting must be selected

What is a channel, or a special channel?

TV channels are transmitted on precisely-defined frequency ranges. These ranges are also referred to as “channels”. Each channel has its own TV station allocated to it. Most cable and satellite TV providers supply tables of channel allocations. Special channels (hyperband channels) are transmitted on special frequencies.



PARDON?

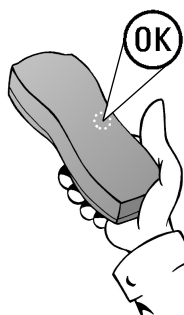
- 7 Use **↓P-** or **↑P+** to select the option “**CHANNEL NUMBER**” and use **↔** or **↔** to enter the number of the TV-Channel required

✗ I don't know the channels for my TV stations

- ✓ No problem. Hold down the button → to start the automatic channel search. A changing channel number will appear on screen. Continue the automatic channel search until you have found the desired TV station



PROBLEM



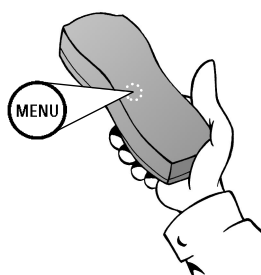
- 8** Press **OK** to store the TV channel found. The screen will briefly show "STORED"

✗ I cannot find the TV channels from my satellite receiver

- ✓ These do not have to be stored as actual TV channels. On your video recorder, select program number "E2". Individual TV channels must be selected on the actual satellite receiver itself



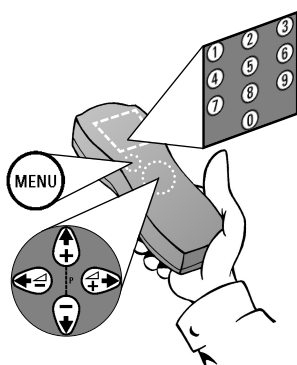
PROBLEM



- 9** Finish manual sorting of TV channels by pressing the **MENU** button or return to step **3** to allocate additional TV channels

Allocating decoder

- 1** Use ↓P- and ↑P+ or the number keys 0-9 to select the TV channel, which will in future be automatically decoded by your decoder



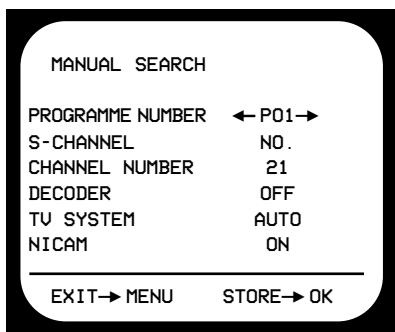
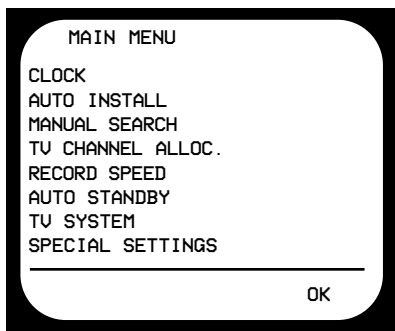
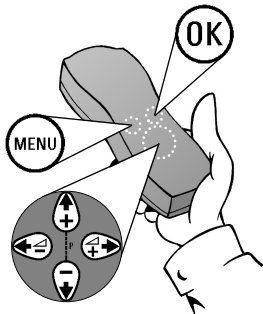
What is a decoder?

Like a deciphering machine, a decoder (available in TV and video stores) deciphers the TV channels for which additional charges must be paid. Without the appropriate decoder, you will receive these TV channels distorted.



PARDON?

- 2** Press the **MENU** button



- 3 The on-screen menu appears. Use the buttons **↓P-** and **↑P+** to select the menu point “MANUAL SEARCH” and confirm with **OK**

What is an on-screen menu?

The on-screen menu takes the mystery out of using your new video recorder. All settings and recording steps can be done easily via the on-screen menu by following the corresponding instructions on the screen.



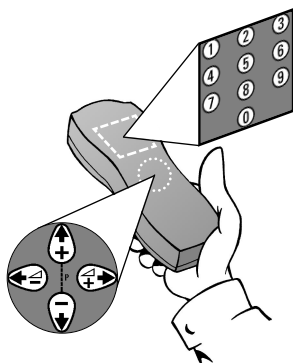
- 4 Use **↓P-** or **↑P+** to select the option “DECODER”
- 5 Using **↔+↔** or **↔-↔**, activate the setting “ON”. The display will show “DEC”. When selecting “OFF” the decoder will not be allocated
- 6 Confirm with **OK** and leave the on-screen menu with the **MENU** button. The screen will show the message “STORED”

Check decoder allocation at a glance

There is no need to call up the on-screen menu to check to which TV channel on the video recorder a decoder is allocated. Simply use **↓P-** and **↑P+** to select a TV channel. If “DEC” appears in the display, a decoder is allocated to this channel.



Using a satellite receiver

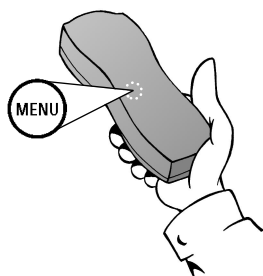


Those TV channels which are received via a satellite receiver connected (to the scart socket **AV2 EXT2**), can be viewed on the video recorder on programme number “**E2**”. On the remote control press the number button **0** and then the button **↓P-** to select this programme number. The TV channels of the satellite receiver are selected not on the video recorder itself, but directly on the satellite receiver.

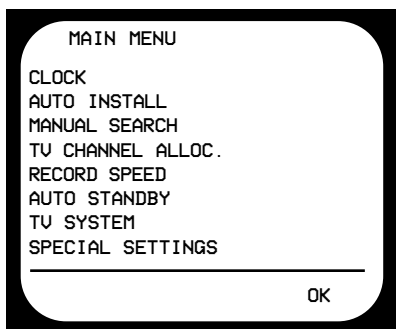
4 Settings

Searching for a TV channel automatically

On initial installation, the video recorder performs an automatic channel search. If the channel assignments of your cable or satellite TV provider change or if you are reinstalling the video recorder, e.g. after moving house, you can start this procedure again. The video recorder finds all the available TV channels and stores the new settings.



- 1 Switch on the TV set and - if necessary - select the programme number set for video recorder operation
- 2 Press the **MENU** button on the remote control. The on-screen menu appears
- 3 Use **↓P-** or **↑P+** to select the option "AUTO INSTALL" (automatic channel search) and confirm with **OK**

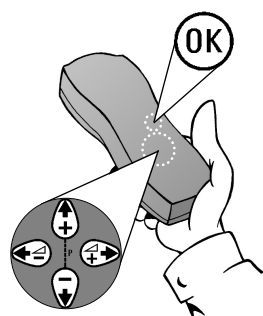


Sequence of TV channels

TV channels are stored in the following sequence: BBC1, BBC2, ITV, CH 4, CH 5, others.



TIP



- 4 The set seeks out and stores all available TV channels. This procedure may take several minutes. As soon as all the TV channels have been stored, the screen will show the message "STORED".



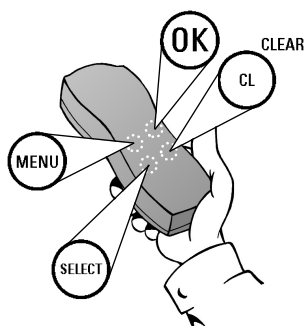
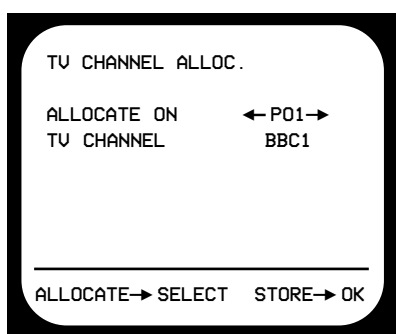
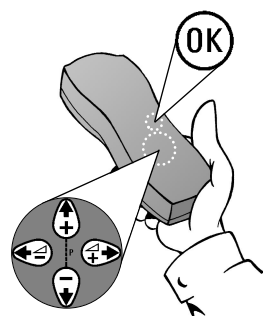
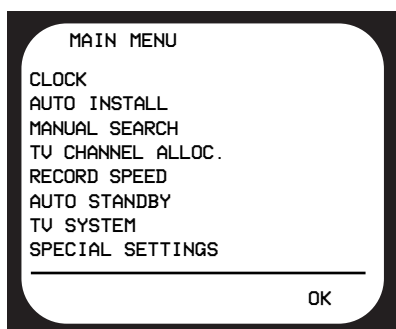
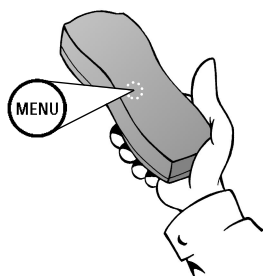
✗ The video recorder is not finding all the TV channels

- ✓ In exceptional cases, it may happen that the set does not find all the available TV channels. In this case, the missing TV channels must be searched for and stored manually. You can look up how to do this in the chapter "Initial installation" ("Searching for TV channel manually").



PROBLEM

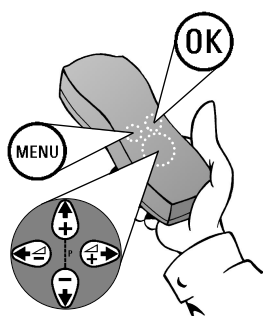
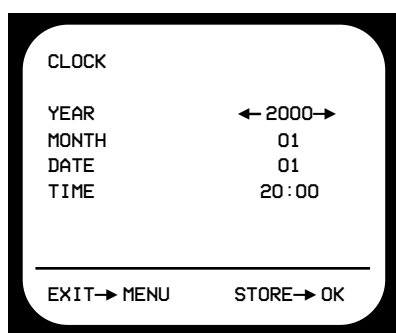
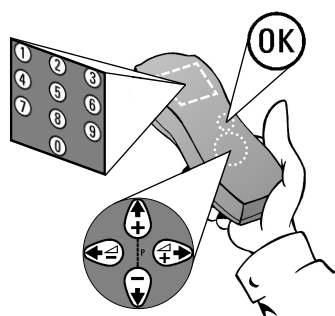
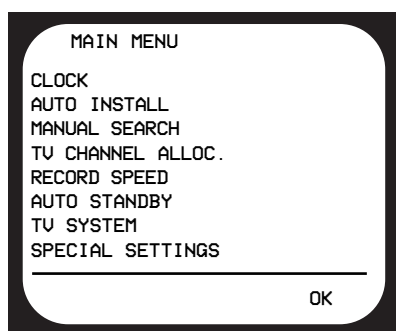
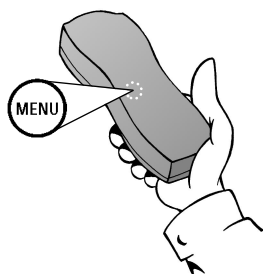
- 5 Finish with the button **MENU**



Sorting and clearing of TV channels manually

After you have performed the automatic channel search you may not agree with the sequence in which the individual TV channels have been allocated to the programme positions of the video recorder. You can use this function to individually sort the TV channels found or to delete unwanted TV channels or those with poor reception.

- 1 Switch on the TV set and - if necessary - select the programme number set for video recorder operation
- 2 Press the **MENU** button on the remote control. The on-screen menu appears
- 3 Use **↓P-** or **↑P+** to select the option "TV CHANNEL ALLOC." and confirm with **OK**
- 4 Use **↖+ →** or **← ↗-** to select the TV channel, to be allocated a programme position
- 5 **Sorting:** Press **SELECT**, to allocate the TV channel to the programme position set **P 01**
Clearing: Delete the TV channel set with **CLEAR (CL)**
- 6 Continue repeating the steps **4** and **5**, to allocate additional TV channels (**P 02, P 03, ...**) or to delete additional TV channels and confirm with **OK**
- 7 Finish the manual sorting / clearing of TV channels with the button **MENU**



Changing the time and date

If the display shows an incorrect time or “---:---”, the time and date must be reset manually.

- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option “**CLOCK**” and confirm with **OK**
- 3 In the “**YEAR**” option – if the setting displayed is incorrect - enter the number of the current year using the number keys **0-9**

Enter the values correctly

Numbers less than 10 must be entered with an additional “0”. Therefore for “9” you must enter “09”.



- 4 Use **↓P-** or **↑P+** to select the option “**MONTH**” and - if the setting displayed is incorrect - enter the current month with the number keys **0-9**
- 5 Use **↓P-** or **↑P+** to select the option “**DATE**” and - if the setting displayed is incorrect - enter the current calendar date with the number keys **0-9**
- 6 Use **↓P-** or **↑P+** to select the option “**TIME**” and - if the setting displayed is incorrect - enter the current time with the number keys **0-9**
- 7 Check the settings displayed for year, month, date and time and store them by pressing **OK**
- 8 Leave the on-screen menu with the **MENU** button

The Teletext clock resets automatically

If you store a TV channel which has Teletext as programme number P01, the video recorder automatically takes in the date and time from the text function. The change from summer to winter time and vice versa should also occur automatically.






Operating instructions

General information

Switching on

If the video recorder is in standby mode, it can be switched on either by pressing the standby button , by pressing one of the number buttons **0-9** or by inserting a cassette.

Automatic switch-off

If the video recorder is not used for several minutes, it switches itself off automatically. This function can be deactivated (e.g. if you want to use the video recorder as a TV receiver). You can find out more about this in the chapter "Other functions" ("Adjusting automatic switch off").


Energy consumption

The video recorder should always be connected to the mains so as not to affect programmed recordings and use of the TV set. Power consumption (in energy saving mode) is less than 4W.

Saving energy

In standby mode, the display of the video recorder shows the current time. This display can be deactivated manually, in order to reduce power consumption to a minimum in standby mode. You can find the necessary steps in the section "Other functions" ("Energy-saving mode").

Emergency exit

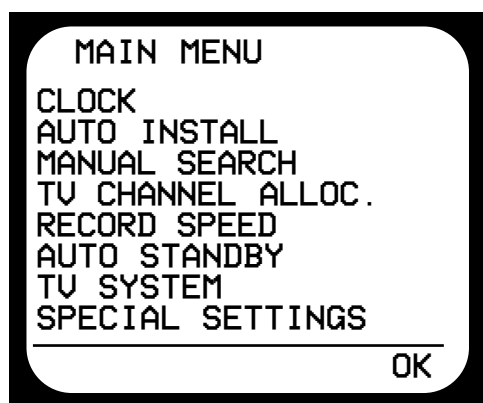
The video recorder and the remote control have the option of an "Emergency exit". You can use the standby button , to interrupt any step during use. But even without an "emergency brake" your new video recorder is safe: there is no risk whatsoever of damaging the set by performing user steps incorrectly.






In the event of a power cut

Channel data are stored for around 1 year, time and timer data remain in the memory of the video recorder for around 3 hours.

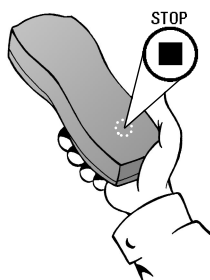
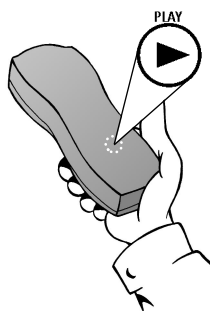
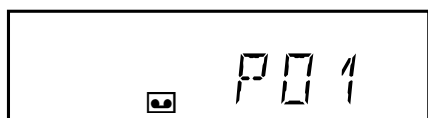
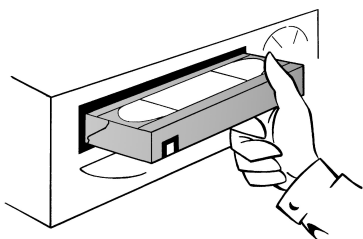
Navigation in the main menu

You can check and / or change many functions and settings of your video recorder via the main menu. The individual functions are selected as follows via the on-screen menu of the video recorder



Call up:	MENU
Select:	↑ P+ or ↓ P-
Confirm:	OK
Enter:	0-9 or  +  and  - 
Interrupt:	STANDBY/ON 
Abandon:	MENU

Playing cassettes



- 1 Insert a VHS cassette in the cassette opening on the front of the video recorder. The tape will be caught and automatically placed in the correct position. The display will show "P01"

What does VHS mean?

The "Video Home System" (VHS) has become the world-wide standard for recording and playback of amateur video cassettes. The popular standard has since been refined. Super-VHS (S-VHS) offers greater sharpness and less noise, Digital-VHS (D-VHS) now only works with digital picture and sound signals. Your video recorder can only record and play standard VHS cassettes.



PARDON?

- 2 Press the Playback button ► to play the tape

✗ Picture / sound quality is poor

- ✓ Please read the section "Removing picture interference" in this chapter.
- ✓ When playing many rental videos or older, poorer quality cassettes, it may not be possible to completely filter out picture and sound interference. There is nothing wrong with the video recorder.



PROBLEM

- 3 Press the Stop button ■ on the remote control (or the Stop/Eject cassette button ■/▲ on the front of the video recorder) to stop the playback

- 4 Press the Stop/Eject cassette button ■/▲ on the front of the video recorder, to remove the tape

Automatic switch-off

Many functions (pause, still picture, search, ...) switch themselves off automatically after a short time in order to protect the cassette and to save energy.



TIP

Playing back NTSC cassettes

If you are using a PAL TV set which is capable of showing a frame frequency of 60 Hz, you can play cassettes which have been recorded on the NTSC standard (USA, Japan, etc.). During an NTSC playback, some special functions (e.g. still picture) are not possible. The display will show "60HZ"

Selecting tape position display type

If the **OK** button is pressed during playback and recording, the current tape position (hours : minutes : seconds) is shown in the display. There are two different types of display available.

- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option "SPECIAL SETTINGS" and confirm with **OK**
- 3 Use **↓P-** or **↑P+** to select the option "COUNTER"

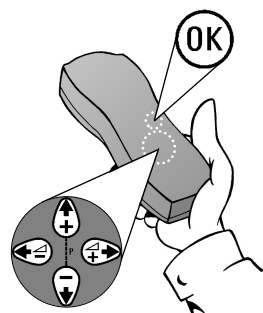
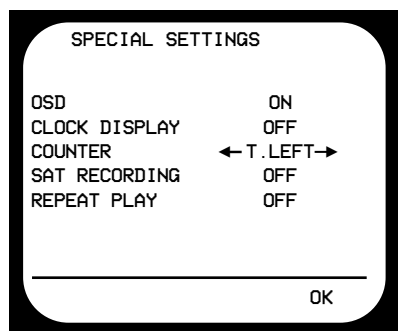
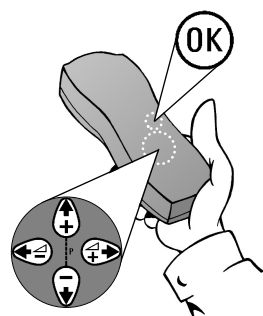
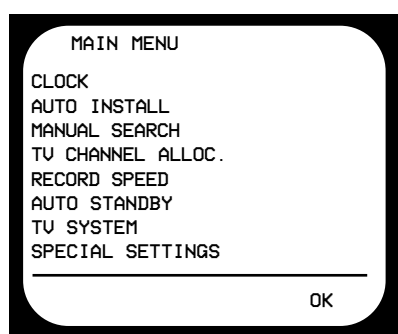
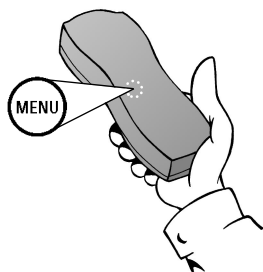
What types of display are available to me?

- "LINEAR": The display shows the number of minutes of tape already played (00:00:00 - hours/minutes/seconds)
- "TIME LEFT": The display shows the playing time remaining until the end of the cassette (00:00 - hours/ minutes)



- 4 Use **↵+** or **↵-** to select the desired display type and confirm with **OK**. The screen will show the message "STORED"

- ✗ The counter stops running when unrecorded places are found ("Linear" display type)
- ✓ This is normal, and is necessary for technical reasons.
- ✗ The display shows a negative playing time
- ✓ This may happen, for example, when you insert an incompletely-rewound cassette into the video recorder and rewind it to the start of the tape. Since the display is automatically reset to "00:00:00" when you insert a cassette, the actual start of the cassette for the set is less than zero - thus in the negative range. The tape position is displayed with a minus sign "-".
- ✗ After inserting a cassette the video recorder shows no remaining playing time
- ✓ The set needs a little time to calculate the remaining playing time. After a few seconds, the display should change from "----" to the corresponding value





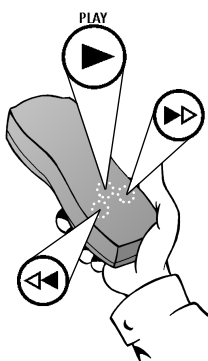
Reset / display tape position

Call up: **OK**

Reset: **CLEAR (CL)** (only in the "LINEAR" display mode)

Automatic reset

Whenever a cassette is inserted the display is automatically reset to "00:00:00".



Searching for tape position with picture (Picture search)

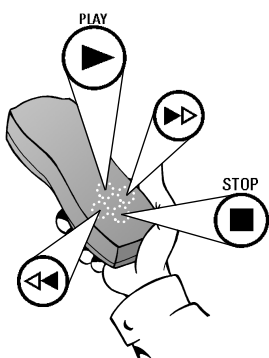
- 1 During playback press ◀◀ (rewind) or ▶▶ (forward)
- 2 Interrupt the search wherever you like with the Playback button ▶

Reduced quality

During picture search the picture quality is affected. The sound is switched off.

Different search speeds

If you press ◀◀ or ▶▶ twice, the tape speed will increase. If you press it again the speed is reduced to normal once more.



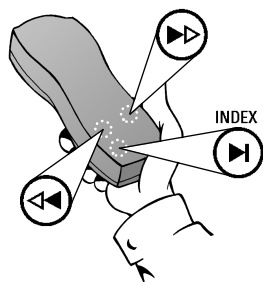
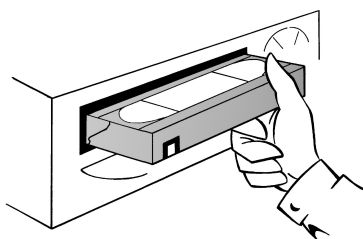
Searching for tape position without picture (Forward wind / Rewind)

- 1 Stop the tape with the Stop button ■
- 2 Press ◀◀ (rewind) or ▶▶ (forward)
- 3 Interrupt the search wherever you like with the Playback button ▶

Switching between rewind / forward wind and picture search (instant view)

When winding the tape backwards or forwards if you hold down ◀◀ (rewind) or ▶▶ (forward wind), the set will immediately switch without a break to picture search (with picture). When you release the rewind or forward wind button the rewind or forward wind process (without picture) will continue





Searching automatically for tape position (Index search)

- 1 Insert a tape recorded on this video recorder or on another set with index marking

What is an index marking?

At the start of each new recording the video recorder automatically places a magnetic marking - similar to a bookmark - at the appropriate place on the tape. These positions can be found again quickly and easily later by pressing a button.



PARDON?

- 2 Press the Index button ►| and then ►► (next index marking) or ◀◀ (previous index marking)
- 3 The video recorder searches for the desired index marking and automatically switches to playback

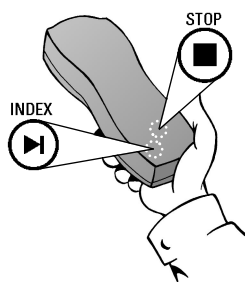
✗ The cassette is ejected

✓ The video recorder was unable to find an index marking on the tape inserted.



PROBLEM

Finding a blank position on tape automatically



- 1 Press the Index button ►| and then the Stop button ■
- 2 The video recorder searches for the next blank part - longer than one minute - of the tape and automatically switches to pause

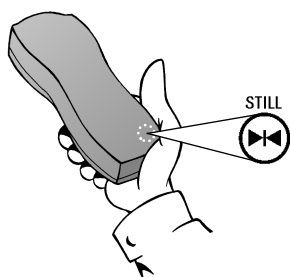
✗ The cassette is ejected

✓ The video recorder was unable to find any blank space on the tape inserted



PROBLEM

Still picture / slow motion



- 1 To stop the picture, press the Still button ►|◀ during playback
- 2 Keep ►|◀ pressed down to play back the picture in slow motion or press ►|◀ several times in succession in order to move the picture forward frame by frame

Play compact VHS cassettes

You can, of course, also use this video recorder to play back compact VHS cassettes. To do this, you will need the appropriate cassette adapter. Its dimensions match those of a normal VHS cassette. The adapter is recognised and treated by the set as a VHS cassette.

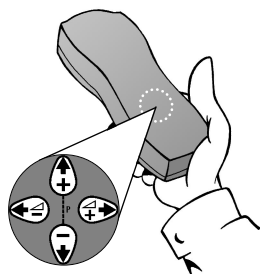


**FOR
EXPERTS**

7

Removing picture interference

Optimizing tracking



TRAC

- 1 During playback, hold down the button ↓P- or ↑P+ until the display shows "TRAC"

What is tracking?

Tracking is the name given to the process of optimizing picture and sound playback. During this process the speed of the tape is adjusted in such a way that all kinds of interference are removed or (in the case of old VHS cassettes) minimized.



PARDON?

- 2 Hold down the button ↓P- or ↑P+ until the playback quality is at its best

- 3 Wait a few seconds until the message "TRAC" disappears from the display

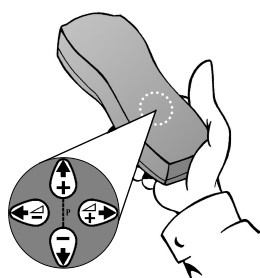
Tracking adjustment is retained

The adjustments made are stored until the cassette is removed. After that, the standard tracking adjustment is restored.



TIP

Optimizing still picture



LIIT

- 1 When still picture is activated hold down the button ↓P- or ↑P+ until the optimal picture quality is obtained. The display will show "LIIT"

✗ I can't get optimal quality

- ✓ When using rental cassettes or older tapes, it may not be possible to get rid of all interference completely



PROBLEM

- 2 Wait a few seconds until the message "LIIT" disappears from the display

The setting is retained

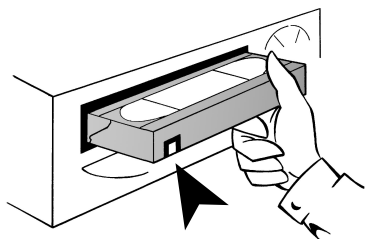
The adjustments made are stored until the cassette is removed. Then the still picture standard setting is restored.



TIP

Starting and stopping of recording manually

- 1 Switch on the TV set and - if necessary - select the programme number set for video recorder operation



- 2 Insert a cassette without erase protection

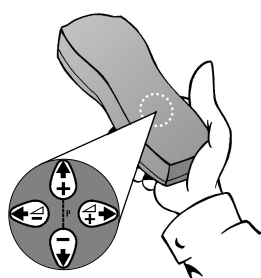
What is erase protection?

VHS cassettes can be protected from over-recording by breaking off a thin strip of plastic (arrow). This erase protection can be overridden by sticking one or more strips of adhesive tape tightly over the gap which has been created.



PARDON?

- 3 Use the buttons ↓P- or ↑P+ to select the programme number, under which your video recorder has stored the desired TV channel



- ✗ I can't find the TV channels from my satellite receiver
- ✗ I want to record from an additional device
- ✓ Signals from additional devices - such as a camcorder, other video recorder, PCs, etc. - are received via the scart socket of the video recorder. The programme numbers "E 1" and "E 2" are allocated for these sources.



PROBLEM

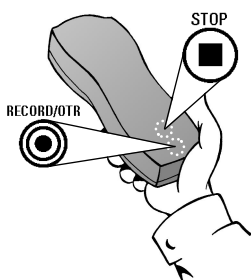
Selecting the recording speed

You have the option of two playback and recording speeds: Standard Play (SP) offers the usual first-class picture quality. By using Long Play (LP), you can (with somewhat reduced picture quality) for example record about 360 minutes of programmes on a 180 minute cassette. This chapter explains how to set the desired recording speed ("Selecting the recording speed").



FOR EXPERTS

- 4 Start recording by pressing the Record button ● (remote control or on front of set). The display will show "○".



Displaying tape position

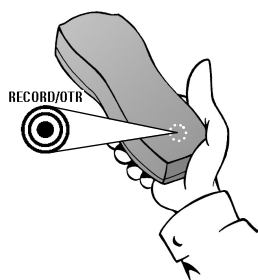
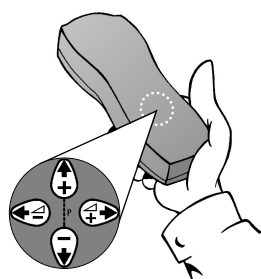
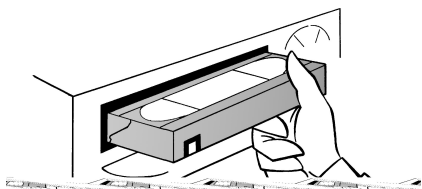
With the OK button you can display the current tape position (see chapter "Playback")



TIP

- 5 End the recording by pressing the Stop button ■





Starting recording manually / stopping automatically

- 1 Insert a cassette without erase protection

What is erase protection?

VHS cassettes can be protected from over-recording by breaking off a thin strip of plastic (arrow). This erase protection can be overridden by sticking one or more strips of adhesive tape tightly over the gap which has been created.



PARDON?

- 2 Use the buttons **↓P-** or **↑P+** to select the programme number, under which your video recorder has stored the desired TV channel

✗ I can't find the TV channels from my satellite receiver

✗ I want to record from an additional device

✓ Signals from additional devices - such as a camcorder, other video recorder, PCs, etc. - are received via the scart socket of the video recorder. The programme numbers "E 1" and "E 2" are allocated for these sources.



PROBLEM

Selecting the recording speed

You have the option of two playback and recording speeds: Standard Play (SP) offers the usual first-class picture quality. By using Long Play (LP), you can (with somewhat reduced picture quality) for example record about 360 minutes of programmes on a 180 minute cassette. This chapter explains how to set the desired recording speed ("Selecting the recording speed").



FOR EXPERTS

- 3 Press the Record button **●** several times. The time faded in corresponds to the duration of recording to be selected. Each time the Record button is pressed again this is increased in regular steps (30 minutes). Stop the adjustment when you have reached the desired duration. Recording will start.

Delete entry

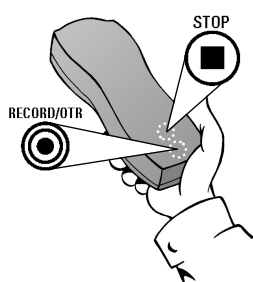
The recording period displayed can be reset to 00:00:00 with the **CLEAR (CL)** button.



TIP

Lining up manual recordings

When you add a further recording to a cassette, which already has a recording on it, a short blank (flicker) usually appears between the old and the new recording. This is how to avoid such an effect.



- 1 Look at the last minute of the old recording (playback)
- 2 Press the Stop button ■ at the point where you want the new recording to start (the display will show II)
- 3 Press the Record button ● in the usual way to start the new recording

Selecting the recording speed

- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option "RECORD SPEED" and confirm with **OK**
- 3 Use **→** **△** + or **←** **△** - to select the desired recording speed ("SP" - Standard Play or "LP" - Long Play or "AUTO" - Auto Long Play)

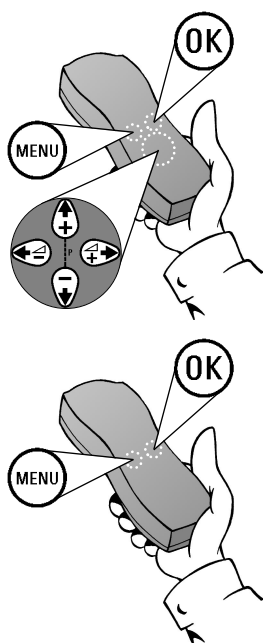
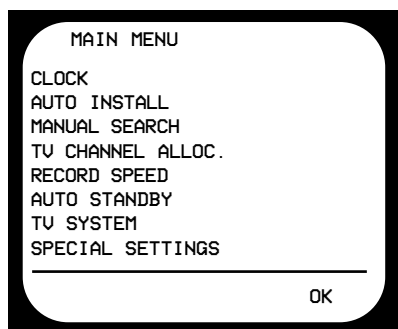
Standard Play / Long Play / Auto Long Play

Standard Play (SP) offers the usual, first-class picture quality. By using Long Play (LP), you can (with somewhat reduced picture quality) for example record about 360 minutes of programmes on a 180 minute cassette. With the Auto Long Play (AUTO) setting, the video recorder calculates, before starting the recording, how much playing time remains on the cassette inserted. Depending on the calculated remaining playing time and the duration of the programmed recording, the recording will be made in Standard Play or Long Play.



PARDON?

- 4 Confirm with **OK**. The screen will show the message "STORED"
- 5 Stop selection of recording speed with **MENU**

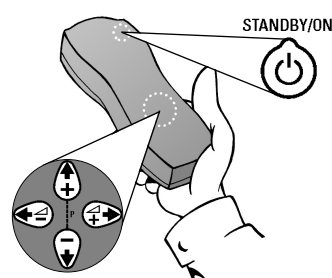
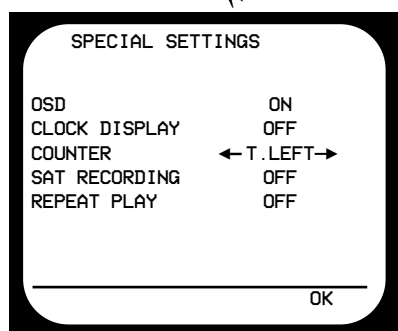
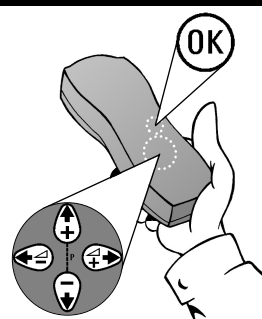
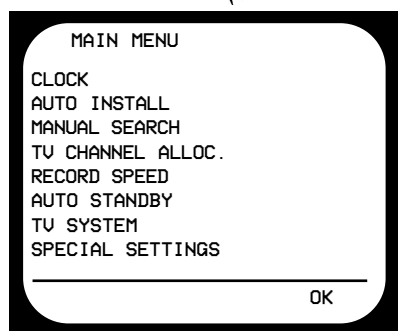
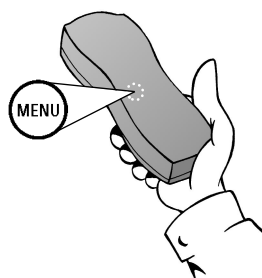



Recording automatically from a satellite receiver


You can only use this function if you have a satellite receiver which can control other devices via a scart cable

What is a scart cable?

The scart or Euro-AV cable serves as the universal recording and playback connector for picture-, sound- and control signals. With this type of connection, there is practically no loss of quality during transfer. We recommend that you use a scart cable when using this video recorder.

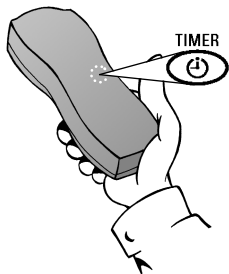


- 1 Insert a cassette without erase protection
- 2 Check that the satellite receiver is connected to the scart socket **EXT.2 AV 2** on the back of the video recorder
- 3 Press the **MENU** button on the remote control. The on-screen menu appears
- 4 Use **↓P-** or **↑P+** to select the option "SPECIAL SETTINGS" and confirm with **OK**
- 5 Use **↓P-** or **↑P+** to select the option "SAT RECORDING"
- 6 Use **→△+** or **←△-** to select the setting "ON", to activate automatic recording from a satellite receiver or "OFF" to deactivate it. Confirm with **OK**. The screen will show the message "STORED"
- 7 Programme the data on the satellite receiver for the desired recording. If necessary, you should refer to the instructions for your satellite receiver for assistance.
- 8 **SWITCH OFF THE VIDEO RECORDER WITH THE STANDBY/ON BUTTON  ! IF YOU DON'T DO THIS, THE SET WILL NOT RECORD.**

When automatic recording has been activated by a satellite receiver, " " will light up in the display

9

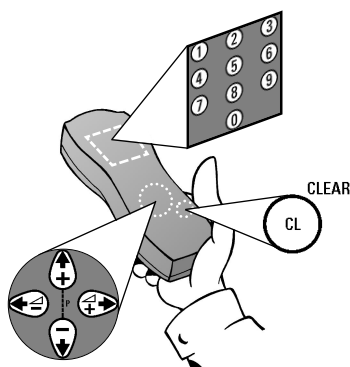
Programmed recordings



VIDEO PLUS+

PLUSCODE	NUMBER	REP.
543124	--	ONCE

REP. → SELECT STORE → OK
 TIMER LIST → TIMER



Programming timer with VIDEO Plus+

- 1 Press the **TIMER** button

What is a Timer?

The timer controls the programmed recordings of your video recorder. Requirements for a timer which works correctly: The clock in the video recorder must be correctly set or the reception of the TV signal must be as free from interference as possible (for example, if there is interference, the video recorder might not correctly recognise the VPS signal of a TV channel).



PARDON?

- 2 The VIDEO Plus screen will appear

What is VIDEO Plus+?

A programming system which replaces the often tiresome entry of date, starting time, finish time and programme number by the simple entry of a number up to nine digits long (which can be found in any TV programme listing).



PARDON?

- 3 Use the **0-9** keys to enter the PlusCode programming number of the TV programme selected: Incorrect entries can be cancelled with the **CLEAR (CL)** button

Daily / weekly recordings

If you like, you can choose with **SELECT** "ONCE" for one-off recordings, "MO-FR" for recordings, which are repeated daily (Mon-Fri) or "WEEK." for recordings, which are repeated each week on the same day.



FOR EXPERTS

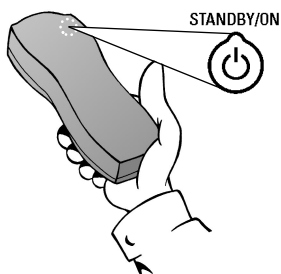
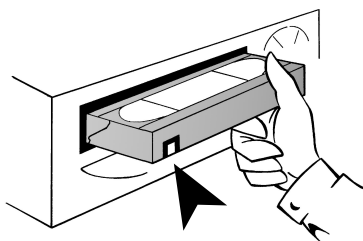
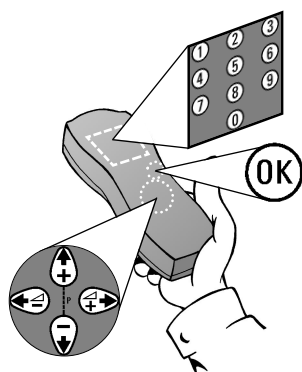
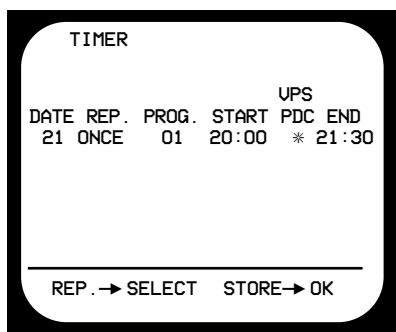
- 4 Confirm with **OK**

X I get the error message "SELECT PROG. NR."

✓ You have entered a correct PlusCode programming number - but automatic recognition of the correct TV channel has failed. Please enter the programme number under which your video recorder has stored the desired TV channel, using the buttons **0-9**, and confirm with **OK**.



PROBLEM



- 5** The details of the previously entered VIDEO Plus recording are displayed. Use → ▴ + or ← ▴ - to select the input fields and - if necessary - change their content with 0-9

Activate VPS/PDC

VPS (Video Programming Service) and PDC signals (Programme Delivery Control) are transmitted by TV channels at the start and end of transmissions and ensure that programmes will be completely recorded, even if they are rescheduled. In the input box, "START" use **SELECT** to switch recognition of these signals on (*) or off ().



- 6** Confirm with **OK**. The screen will show the message "STORED"

Selecting the recording speed

You have the option of two playback and recording speeds: Standard Play (SP) offers the usual first-class picture quality. By using Long Play (LP), you can (with somewhat reduced picture quality) for example record about 360 minutes of programmes on a 180 minute cassette. This chapter explains how to set the desired recording speed ("Selecting the recording speed").



- 7** Insert a cassette without erase protection

What is erase protection?

VHS cassettes can be protected from over-recording by breaking off a thin strip of plastic (arrow). This erase protection can be overridden by sticking one or more strips of adhesive tape tightly over the gap which has been created.












- 8** SWITCH OFF THE VIDEO RECORDER WITH THE **STANDBY/ON** BUTTON ! IF YOU DON'T DO THIS, THE SET WILL NOT RECORD.

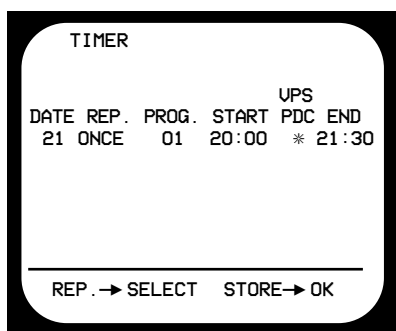
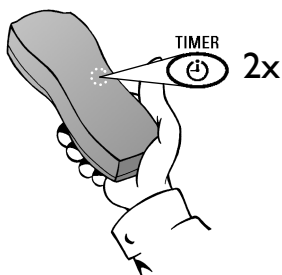
The display will show "⏻"

YOU WILL FIND TIPS FOR SOLVING PROBLEMS TO DO WITH VIDEO PLUS RECORDING ON THE FOLLOWING PAGE.



Problem solving (VIDEO Plus-Programming)

PROBLEM	SOLUTION
Error message: “SELECT PROG. NR.”	A correct PlusCode programming number has been entered - but automatic recognition of the correct TV channel has failed. Please enter the programme number under which your video recorder has stored the desired TV channel using the buttons 0-9 and confirm with OK .
Error message: “PLUSCODE NUMBER NOT VALID”	The Pluscode programming number entered is incorrect or does not match the date entered. Please enter it again or finish with the STANDBY/ON button  .
Error message: “MO-FR PROGRAMMING NOT POSSIBLE FOR WEEKEND”	The attribute “MO-FR” has been selected for a recording at the weekend. This is only possible for recordings from Monday to Friday. Please enter it again or finish with the STANDBY/ON button  .
Error message: “SWITCH TO STANDBY - TIMER RECORDING”	A recording was programmed, but the video recorder was not switched into timer mode with the standby button  . Press STANDBY/ON  in order to make the programmed recording. Warning: if you do not do this, the video recorder will not record.
Error message: “NO CASSETTE”	A recording was programmed, but there is no cassette in the machine. Insert a cassette ready for recording without erase protection.
Error message: “ALL TIMERS OCCUPIED”	All the available memory locations in your video recorder for timer and VIDEO Plus programming are full. Delete a programmed recording (see chapter “Delete a programmed recording”).
“” and/or “” are flashing in the display of the video recorder	<p>A recording was programmed, but there is no cassette in the machine. Insert a cassette ready for recording without erase protection.</p> <p>A recording was programmed, but the video recorder was not switched into timer mode with the standby button . Press STANDBY/ON  in order to make the programmed recording. Warning: if you do not do this, the video recorder will not record.</p>
Cassette is ejected after programming	A cassette with erase protection was inserted. Please deactivate the erase protection or insert another cassette which is ready for recording.
Cassette is ejected during recording	The end of the tape was reached during a programmed recording. The recording could not be completed satisfactorily.
The set cannot be used during recording	Once started, a recording can only be interrupted by pressing the STANDBY/ON button  . WARNING: This will not only stop the recording, but it will also delete the programmed recording from the memory of the video recorder.
Year / month / date / time display appears	The time has not been set or not set correctly. After entering / confirming year, month, date and time, you can continue programming.



Programming timer without VIDEO Plus+

- 1 Press the **TIMER** button twice
- 2 The Timer screen will appear
- 3 If necessary use **↓P-** or **↑P+** to select a free memory location and confirm with **TIMER** .

What is a memory location?

For technical reasons, your video recorder has access to a limited number of “drawers” in which you can store your programming requirements. “Drawers” occupied by programme recording details are only available for use again after the video recorder has successfully completed a programmed recording or if it has been manually deleted. Your video recorder can store up to six timer programmings.



PARDON?

- 4 Use **↶+ →** or **← ↷-** to select the input field “DATE” and enter the date of your desired recording

Daily / weekly recordings

If you like, you can use **SELECT** “MO-FR” for recordings which are repeated daily or “WEEK.” (weekly) for recordings which are repeated each week on the same day.



FOR EXPERTS

- 5 Use **↶+ →** or **← ↷-** to select the input field “PROG.” and enter the programme number under which the video recorder has stored the desired TV channel

Enter the values correctly

Numbers less than 10 must be entered with an additional “0”. Therefore for “9” you must enter “09”.



TIP

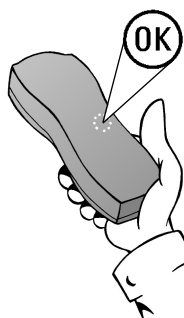
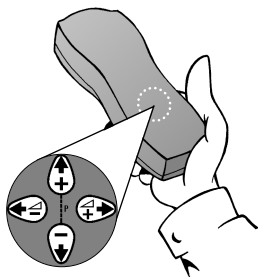
- 6 Use **↶+ →** or **← ↷-** to select the input field “START” and enter the start time of the desired recording

Activate VPS/PDC

VPS (Video Programming Service) and PDC signals (Programme Delivery Control) are transmitted by TV channels at the start and end of transmissions and ensure that programmes will be completely recorded, even if they are rescheduled. In the input field, “START” use **SELECT** to switch recognition of these signals on (*) or off ().



FOR EXPERTS



7 Use $\blacktriangle + \rightarrow$ or $\blacktriangleleft -$ to select the input field "END." and enter the end time of the desired recording

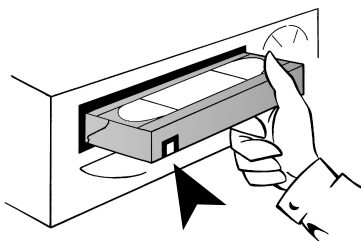
8 Check that the date, programme number, start and finish time are shown correctly on the screen. Confirm with the **OK** button. The screen will show the message "STORED"

Selecting the recording speed

You have the option of two playback and recording speeds: Standard Play (SP) offers the usual first-class picture quality. By using Long Play (LP), you can (with somewhat reduced picture quality) for example record about 360 minutes of programmes on a 180 minute cassette. This chapter explains how to set the desired recording speed ("Selecting the recording speed").



FOR EXPERTS



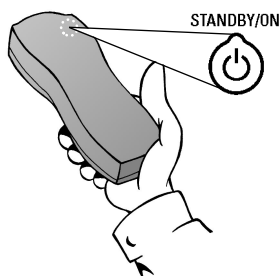
9 Insert a cassette without erase protection

What is erase protection?

VHS cassettes can be protected from over-recording by breaking off a thin strip of plastic (arrow). This erase protection can be overridden by sticking one or more strips of adhesive tape tightly over the gap which has been created.



PARDON?



10 SWITCH OFF THE VIDEO RECORDER WITH THE **STANDBY/ON** BUTTON ⏻ ! IF YOU DON'T DO THIS, THE SET WILL NOT RECORD.

The display will show "⏻"

YOU WILL FIND TIPS FOR SOLVING PROBLEMS TO DO WITH TIMER RECORDING ON THE FOLLOWING PAGE.



PROBLEM

Problem solving (Timer programming)


PROBLEM



SOLUTION

**Error message:
“NO CASSETTE”**


A recording was programmed, but there is no cassette in the machine. Insert a cassette ready for recording without erase protection.

**Error message:
“SWITCH TO STANDBY -
TIMER RECORDING”**

A recording was programmed, but the video recorder was not switched into timer mode with the standby button. Press **STANDBY/ON**  in order to make the programmed recording. Warning: if you do not do this, the video recorder will not record.

**“” and/or “” are
flashing in the display of
the video recorder**

A recording was programmed, but there is no cassette in the machine. Insert a cassette ready for recording without erase protection.

A recording was programmed, but the video recorder was not switched into timer mode with the standby button. Press **STANDBY/ON**  in order to make the programmed recording. Warning: if you do not do this, the video recorder will not record.

**Error message:
“ALL TIMERS OCCUPIED”**

All the available memory locations in your video recorder for timer and VIDEO Plus programming are full. Delete a programmed recording (see chapter “Delete / check / change programmed recordings”).


**Cassette is ejected
during recording**

The end of the tape was reached during a programmed recording. The recording could not be completed satisfactorily.

**Cassette is ejected
after programming**

A cassette with erase protection was inserted. Please deactivate the erase protection or insert another cassette which is ready for recording.



**The set cannot be
used during recording**

Once started, a recording can only be interrupted by pressing the **STANDBY/ON** button . WARNING: This will not only stop the recording, but it will also delete the programmed recording from the memory of the video recorder.

**Year/month/date/time
display appears**

The time has not been set or not set correctly. After entering / confirming year, month, date and time, you can continue programming.

Recording via external sources

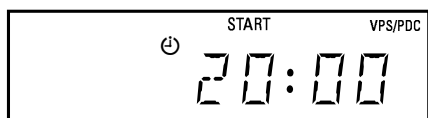
If you want to watch or record transmissions from a satellite receiver, films from a video camera (or from other external devices), connect the device to the scart socket **EXT1 AV1** or **EXT2 AV2** and select the programme number on your video recorder “ 1” or “ 2”.



**FOR
EXPERTS**

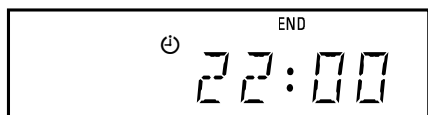
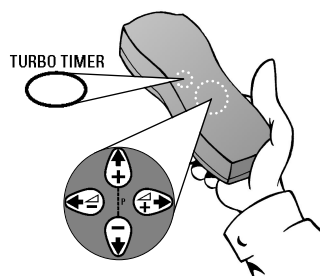
“Turbo Timer”-Recording

Using the “Turbo Timer”, you can make a programmed recording within the next 24 hours quickly and simply, without having to switch on the TV set. All you need to do now is enter or confirm the desired programme number and start and finish time in the video recorder.



1 Press the **TURBO TIMER** button on the remote control.

2 The display shows the actual starting time, e.g.: “START 20:00”. Change – if necessary – the displayed start time with **↓P-** or **↑P+**.



Activate VPS/PDC

VPS (Video Programming Service) and PDC signals (Programme Delivery Control) are transmitted by TV channels at the start and end of transmissions and ensure that programmes will be completely recorded, even if they are rescheduled. Use **SELECT** to switch recognition of these signals on (VPS / PDC appears in the display) or off.

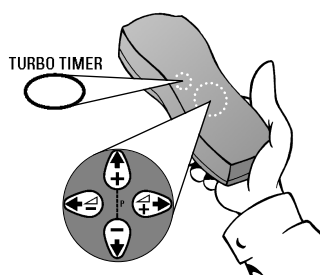
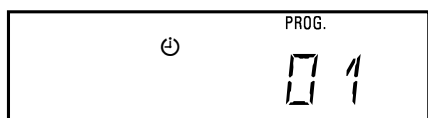
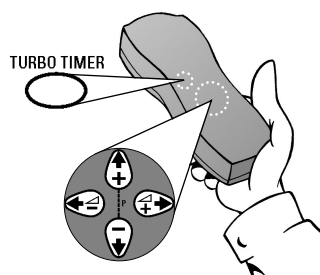


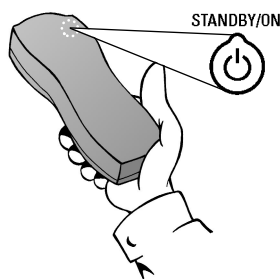
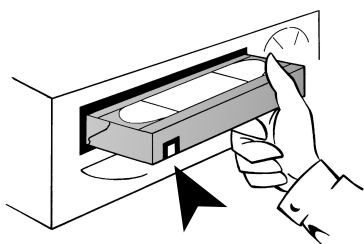
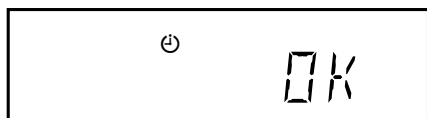
FOR EXPERTS

3 Confirm with the **TURBO TIMER** button

4 The display shows a suggestion for the end of the recording e.g.: “END 22:00” (Start time + 2 hours). Change – if necessary – the displayed start time with **↓P-** or **↑P+**. Confirm with the **TURBO TIMER** button

5 The display shows the programme number to which the video recorder is currently set, e.g.: “PROG. 01”. Change – if necessary – the displayed start time with **↓P-** or **↑P+**. Confirm with the **TURBO TIMER** button. The display briefly shows “OK”.





6 Insert a cassette without erase protection

What is erase protection?

VHS cassettes can be protected from over-recording by breaking off a thin strip of plastic (arrow). This erase protection can be overridden by sticking one or more strips of adhesive tape tightly over the gap which has been created.



PARDON?

7 SWITCH OFF THE VIDEO RECORDER WITH THE STANDBY/ON BUTTON ! IF YOU DON'T DO THIS, THE SET WILL NOT RECORD.

The display will show "

Problem solving (Turbo Timer programming)

PROBLEM

SOLUTION

**Error message: "CASS",
" will blink in the display**

A recording was programmed, but there is no cassette in the machine. Insert a cassette ready for recording without erase protection.

Error message: "FULL"

All the available memory locations in your video recorder for timer and VIDEO Plus programming are full. Delete a programmed recording (see chapter "Delete / check / change programmed recordings").


**Cassette is ejected
during recording**

The end of the tape was reached during a programmed recording. The recording could not be completed satisfactorily.

**Cassette is ejected
after programming**

A cassette with erase protection was inserted. Please deactivate the erase protection or insert another cassette which is ready for recording.

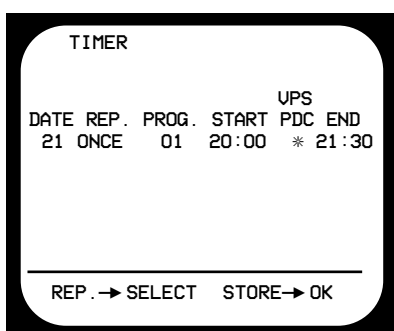
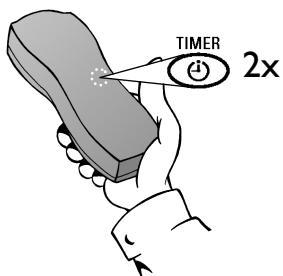
**The set cannot be
used during recording**


Once started, a recording can only be interrupted by pressing the **STANDBY/ON** button . **WARNING:** This will not only stop the recording, but it will also delete the programmed recording from the memory of the video recorder.

Error message: "CLK"

The time has not been set or not set correctly. A Turbo Timer recording is not possible. Please enter the correct time (Section "Changing the time and date")

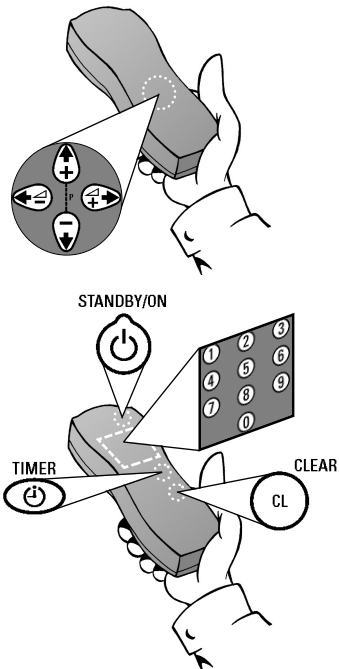
Delete / check / change programmed recordings






- 1 Press the **TIMER** button  on the remote control **twice**
- 2 Use the buttons **↓P-** or **↑P+** to select the memory location in the display which you want to check / change / delete

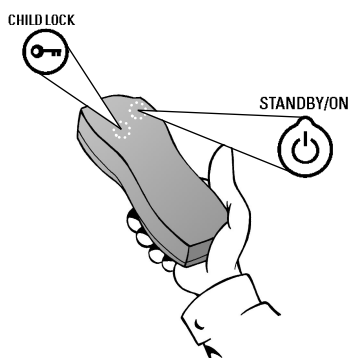
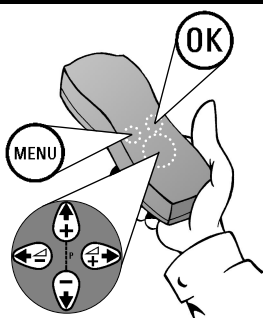
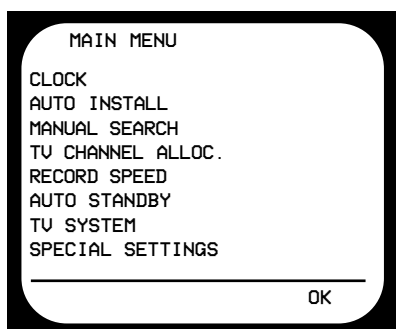
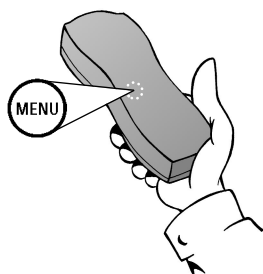
What is a memory location?

For technical reasons, your video recorder has access to a limited number of “drawers” in which you can store your programming requirements. “Drawers” occupied by programme recording details are only available for use again after the video recorder has successfully completed a programmed recording or if it has been manually deleted.



- 3 **Delete:** Press **CLEAR (CL)** and finish with the button **OK**.
- Check:** Press **TIMER** , check the stored details and (once you have checked) end with **OK**
- Change:** Press **TIMER**  and use the buttons **0-9** to enter the new value(s). Confirm with **OK** and activate the timer again with the Standby button .

10 Other functions



Adjusting automatic switch-off

If the video recorder is not used for several minutes, it switches itself off automatically. If you want to use the video recorder as a TV receiver, you can deactivate the automatic switch-off as follows:

- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option "AUTO STANDBY" and confirm with **OK**
- 3 Use **↔** or **↔** to select the setting "OFF" (automatic switch-off deactivated) or "ON" (automatic switch-off activated) and confirm with **OK**. The screen will show the message "STORED"
- 4 Complete the adjustment of automatic switch-off with the **MENU** button

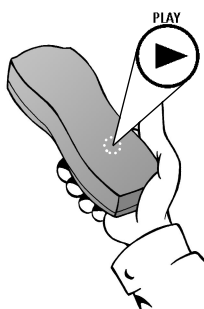
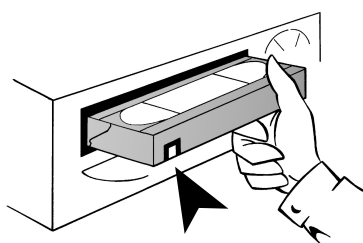
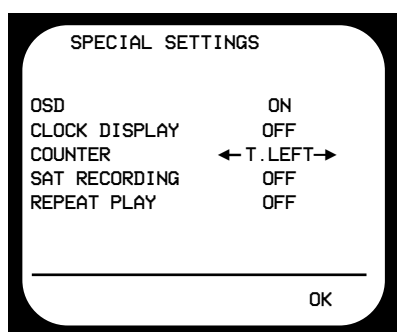
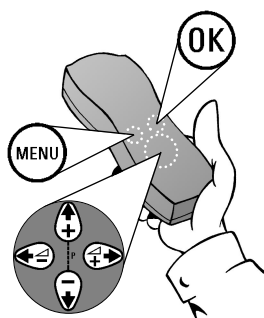
Adjusting the child lock

You can prevent unauthorised use of your video recorder with this function. Once it is activated, the buttons on the front of the set are locked. Previously entered programmes will of course be recorded

- 1 Press the **CHILD LOCK** button for a few seconds, until the display shows "". The child lock is now activated. Switch off the video recorder with the Standby button on the remote control. The set can now only be switched on with the remote control. Put away the remote control in a secure place
- 2 To deactivate the child lock, press the **CHILD LOCK** button for a few seconds until "" disappears

Replaying cassette continuously

This function can be used to play a tape over and over again. If the end of the cassette or of the recording has been reached, the video recorder automatically rewinds to the start of the tape and starts to play back again. This function is activated or deactivated as follows:



- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option "SPECIAL SETTINGS" and confirm with **OK**
- 3 Use **↓P-** or **↑P+** to select the option "REPEAT PLAY"
- 4 Use **↔+→** or **←↔** to select the setting "ON" (continuous playback) or "OFF" (no continuous playback) and confirm with **OK**. The screen will show the message "STORED"
- 5 Complete the adjustment of continuous playback with the **MENU** button
- 6 Insert a cassette without erase protection

What is erase protection?

VHS cassettes can be protected from over-recording by breaking off a thin strip of plastic (arrow). This erase protection can be overridden by sticking one or more strips of adhesive tape tightly over the gap which has been created.

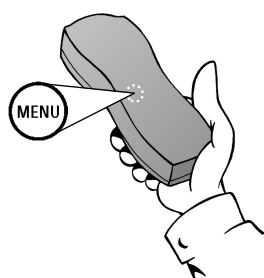
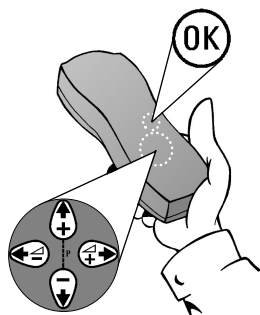
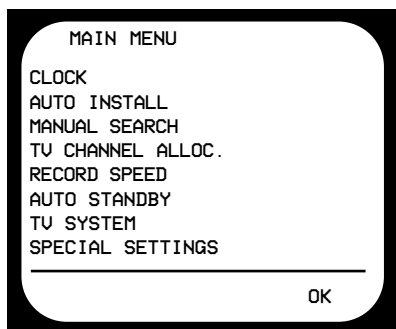
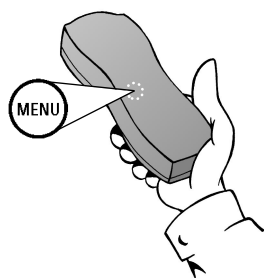


PARDON?

- 7 Press the Playback button **▶** to start the playback or continuous playback (depending on the setting)

Changing the TV system

When playing back cassettes which have been recorded with signals from a different TV system there may be interference with the colour. To deactivate the automatic change to a different TV system, you must follow these steps.



TV systems

Other countries, other TV systems: In central Europe transmissions are broadcast in the PAL-System (Phase Alternation Line) Standard, while in France SECAM (Séquentiel à mémoire) is used. In some countries (USA and Japan), TV viewers receive their programmes as an NTSC signal (National Television System Committee). Many TV and video sets can process and show several transmission systems.



PARDON?

- 1 During playback press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option "TV SYSTEM" and confirm with **OK**
- 3 Use **↔+ →** or **← ↔-** to select the desired TV system or "B/W" for black and white playback and confirm with **OK**

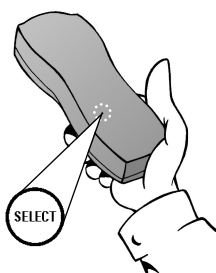
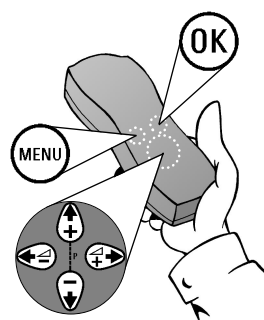
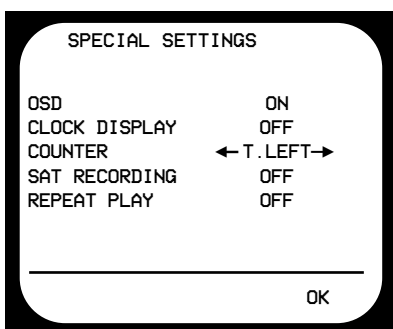
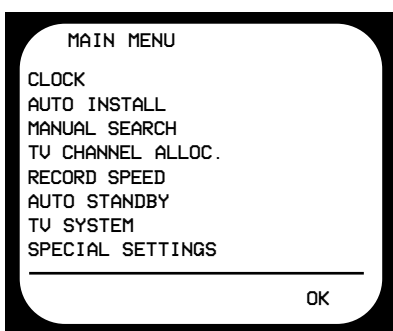
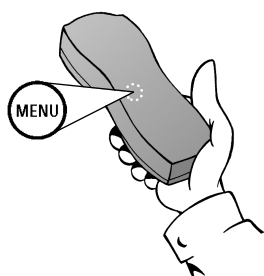
Reactivating automatic change-over

As soon as the cassette is ejected with the Stop/Eject button **■/▲** the set switches automatically back to the "AUTO" setting (automatic switching). To change the setting during playback, perform the steps **1-3** again and select "AUTO".



TIP

- 4 End the change-over to automatic TV system changing with the **MENU** button



Adjusting the OSD information

If this function is activated, the current operating details of the video recorder will be briefly displayed on the screen

What is an OSD?

The on-screen menu or OSD ("On Screen Display" takes the mystery out of using your new video recorder. Using the main menu (MENU button on your remote control), all settings and recording steps can be done easily via the on-screen menu by following the corresponding instructions on the screen.



- 1 During playback press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option "SPECIAL SETTINGS" and confirm with **OK**
- 3 Use **↓P-** or **↑P+** to select the option "OSD"
- 4 Use **↙+→** or **←↘** to select the setting "ON" (OSD information on) or "OFF" (OSD information off) and confirm with **OK**

What goes on behind the settings?

ON: For each type of operation selected (playback, recording, etc.) the corresponding symbol appears briefly on the screen

OFF: OSD information is not shown

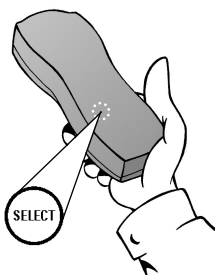


- 5 Complete the adjustment of the OSD information with the **MENU** button

Selecting the sound channel

During playback or while receiving a TV channel via the video recorder, one or more sound channels can be selected. This means, for example, if there are multilingual transmissions, you can select the language you want.

- 1 Press the **SELECT** button on the remote control. The current sound channel setting is displayed



What goes on behind the settings?

- STEREO:** Both left and right stereo sound tracks can be heard
- LEFT:** The left stereo sound track can be heard
- RIGHT:** The right stereo sound track can be heard
- MONO:** The mono sound track can be heard
- MIX:** The mono sound track as well as the left and right stereo sound tracks can be heard



TIP

- 2 Press the **SELECT** button several times until the desired setting can be seen on the screen

Automatic switch-over to mono

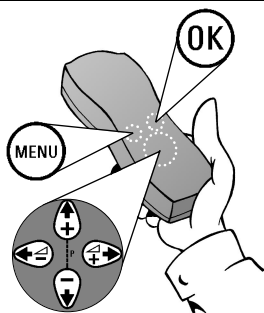
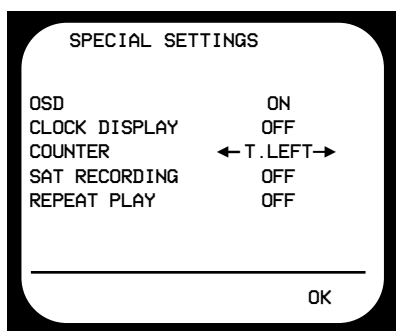
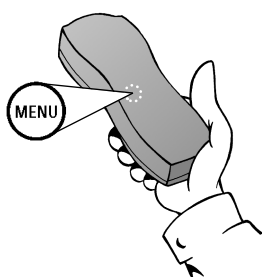
If no stereo signal is recorded on a video cassette, the video recorder automatically switches over to the "MONO" sound channel setting

Make dubbing audible

When dubbing video recordings, the mono track is recorded with a new sound signal. The original stereo signal is retained. To make dubbing audible, you must select the "MIX" or "MONO" sound channel setting.



TIP



Energy-saving mode

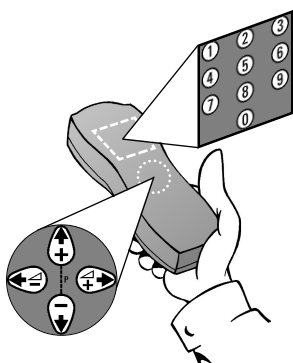
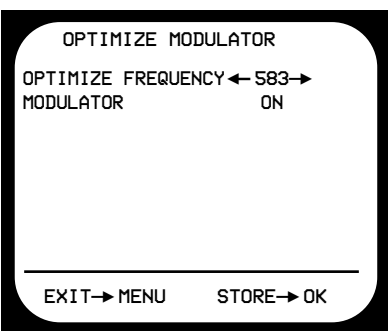
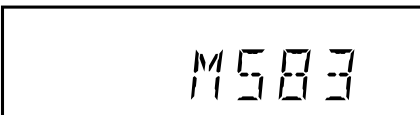
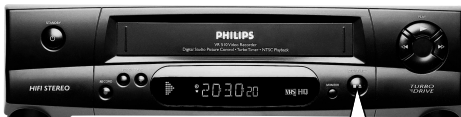
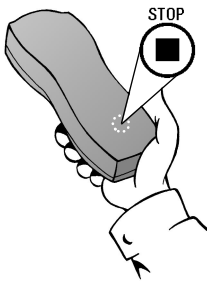
To reduce the power consumption of the video recorder you can switch the clock in the display of the video recorder on or off as follows:

- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option "SPECIAL SETTINGS" and confirm with **OK**
- 3 Use **↓P-** or **↑P+** to select the option "CLOCK DISPLAY"
- 4 Use **↙+→** or **↘-←** to select the setting "ON" or "OFF" and confirm with **OK**. The screen will show the message "STORED"
- 5 Complete the adjustment of the clock display with the **MENU** button

Suppressing interference

Optimizing the modulator

If the TV set and the video recorder are only connected with an aerial cable - rather than with an additional scart cable - it may happen that in certain reception locations the modulator frequency of the video recorder is occupied by a TV channel. Result: As soon as the video recorder is switched on, the reception quality of the TV picture deteriorates. The following steps will show you how to overcome this problem.



What is a modulator?

The purpose of this electronic assembly inside your video recorder is to pass on the picture and sound information read in from the video tape via an aerial cable like a TV signal to the TV set. The modulator frequency determines the frequency range in which these signals are transmitted.



TIP

- 1 Switch the video recorder on and make sure there is no cassette in the video recorder
- 2 Press at the same time the **STOP** button ■ on the remote control and the **STOP/EJECT** button ▲ on the front of the video recorder until the modulator frequency of the set appears in the display (e.g.: "M583" for 583 MHz)
- 3 The video recorder will now transmit a test image on this frequency
- 4 Use ↓P- or ↑P+ to select the option "OPTIMIZE FREQUENCY" and enter a new frequency with the number buttons 0-9

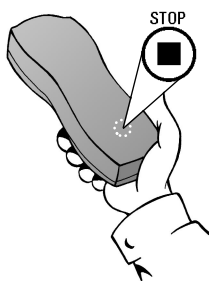
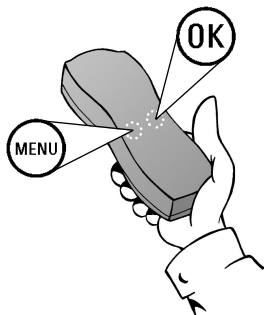
Which modulator frequency should I enter?

You can also make the video recorder search automatically for an appropriate frequency. To do so, simply hold down the buttons ▲ + →. As soon as a free frequency has been found, it will be shown in the display.

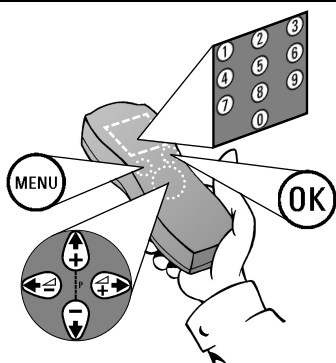
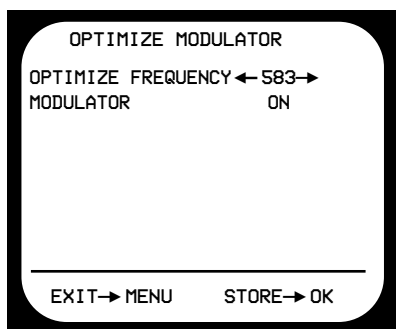


PROBLEM

- 5 Tune the programme number of your TV set allocated for video use to the new modulator frequency until you see the test image sharply and in colour



M583



- 6 Confirm the new modulator frequency with **OK**. In the display there will briefly appear “**OK**”
- 7 Leave the on-screen menu with the **MENU** button

Switching off the modulator

If you have connected the video recorder to the TV set with a scart cable, you can switch off the modulator when there is interference with the picture or sound (see below).






Switching the modulator on and off

If picture and sound interference cannot be removed by optimizing the modulator, the integral modulator can be switched off. Warning: this is only possible if you have connected the video recorder to the TV set with a scart cable. It is not possible to operate with the modulator switched off without a scart cable.

- 1 Switch the video recorder on and make sure there is no cassette in the video recorder
- 2 Press at the same time the **STOP** button ■ on the remote control and the **STOP/EJECT** button ▲ on the front of the video recorder until the modulator frequency of the set appears in the display (e.g.: “M583” for 583 MHz)
- 3 The video recorder will now transmit a test image on this frequency
- 4 Use ↓P- or ↑P+ to select the option “MODULATOR”
- 5 Use ▲+→ or ←▲- to select the setting “ON” (Modulator on) or “OFF” (Modulator off)
- 6 Confirm with **OK**. In the display there will briefly appear “**OK**”
- 7 Leave the on-screen menu with the **MENU** button

Before you call an engineer








PROBLEM	POSSIBLE CAUSE / SOLUTION
Set no longer reacts when buttons are pressed	<ul style="list-style-type: none"> ✓ Mains power has been interrupted / failed ✓ A programmed recording is running. Interrupt with the standby button  ✓ Child lock is activated: Switch this function off ✓ Technical interference: Remove the mains plug from the socket and reinsert it
The set is still not reacting, display shows e. g. „E000“	<ul style="list-style-type: none"> ✓ Remove the mains plug from the socket, hold down the standby button  on the front of the video recorder and reinsert the mains plug. When “---:---” or “E 1” appears in the display you can release . Warning: All data memories of the set (TV channel, time, timer) have been deleted.
Cassette is jammed in video recorder	<ul style="list-style-type: none"> ✓ Do not use force! Briefly remove the mains plug and then reinsert it
Remote control does not work	<ul style="list-style-type: none"> ✓ Aim the end of the remote control at the display of the video recorder ✓ Remove the batteries from the remote control and wait a few seconds before replacing them ✓ Batteries weak or flat: Change the batteries
No playback from video recorder	<ul style="list-style-type: none"> ✓ No recording on the cassette ✓ Select the TV programme number allocated to video operation ✓ Check that the TV channel number allocated to video operation is correct ✓ Cable connection loose / missing: Check the connections
Poor quality playback from video recorder	<ul style="list-style-type: none"> ✓ Check the TV to make sure that the programme number allocated to video operation is correct ✓ Cassette worn / faulty ✓ Tracking not correctly adjusted: Carry out the “Optimizing tracking” function
No recording possible	<ul style="list-style-type: none"> ✓ TV channel not stored or wrongly selected ✓ Cassette with erase protection inserted
Programmed recording not working	<ul style="list-style-type: none"> ✓ Wrong / incompletely programmed memory location ✓ Time / date not set correctly ✓ Cassette with erase protection inserted
Picture and / or sound interference in TV reception	<ul style="list-style-type: none"> ✓ Optimize the modulator or switch it off (when using a scart cable) ✓ Check the aerial cable connection
TV reception still not perfect	<ul style="list-style-type: none"> ✓ The Department of Trade and Industry operates a specialist service to help TV licence holders improve reception of BBC and ITC programmes and to prevent interference. If your dealer cannot help, ask at a main Post Office for the booklet “How to improve Television and Radio Reception”.

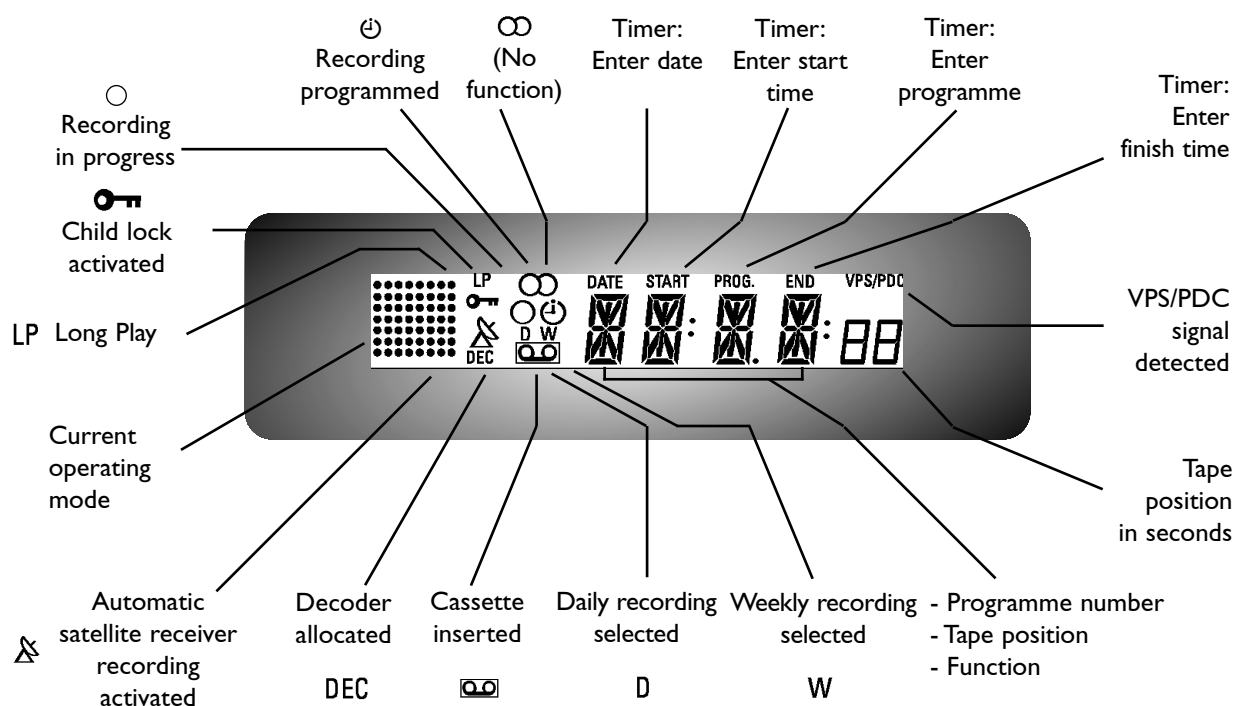
TECHNICAL DATA

Dimensions in cm (W/H/D):	38,0/9,3/26,0
Energy consumption	16W
Energy consumption (Low Power Standby)	< 4W
Mains voltage:	198-264 V / 50 Hz
Number of video heads:	4
Number of audio heads:	1 linear, 2 FM
Rewind / forward wind speed:	approx. 100 seconds (E180 cassette)
Recording / playback speed (E240 cassette):	SP (Standard Play) 4 hours, LP (Long Play) 8 hours

Notes



- | | | |
|---|--|--|
| 1 | STANDBY/ON  | ➤ Switch set on / off |
| | | ➤ Interrupt function |
| | | ➤ Interrupt programmed recording |
| 2 | RECORD  | ➤ Record |
| 3 | PROGRAMME - | ➤ Select previous programme no. / menu point |
| 4 | PROGRAMME + | ➤ Select next programme no. / menu point |
| 5 | MONITOR | ➤ Toggle between TV and video recorder reception |
| 6 | STOP/EJECT  /  | ➤ 1x: Stop tape |
| | | ➤ 2x: Eject tape |
| 7 |  | ➤ In Stop or Standby mode: Rewind tape |
| | | ➤ During playback: Reverse picture search |
| |  | ➤ In Stop or Standby mode: Forward wind tape |
| | | ➤ During playback: Forward picture search |
| | PLAY  | ➤ Play back recorded cassette |



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